

# Beatrice FMGP Site

City of Beatrice Briefing  
March 17, 2015

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## Site Location




Photo of a FMGP similar to the Beatrice FMGP

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## Objectives

Brief the City on the Superfund National Priorities List (NPL) process and receive feedback on listing the Beatrice FMGP Site on NPL

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## Overview of Presentation

- Site Background and Status
- Extent of Contamination
- Current and Future Risk Exposures
- Planned Removal Actions
- Additional Cleanup Actions Needed
- Superfund Process
- Hazard Ranking System/National Priority List Process
- State Role/Concerns
- Next Steps

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## Site Background

- Beatrice Gas & Power Company owned the land and probably built the manufactured gas plant (MGP) in 1907. Owners changed names several times. Both coal and Lowe's Water Gas processes were used.
- Iowa-Nebraska Light & Power bought the plant in 1927 and operated it until about 1929.
- Centel predecessor bought the property in 1945. City bought the property in 1996 and cleared the remaining structures for floodway enhancement.

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## Site Status

- Centel and City are the Potentially Responsible Parties (PRPs) for cleanup, and are under Administrative Order on Consent (AOC) to conduct an Engineering Evaluation and Cost Analysis (EE/CA) for cleanup
- EE/CA has been completed, with the proposed Removal Action components identified
- EPA will negotiate with PRPs for a second AOC to conduct the Non-Time Critical Removal Action

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## Site Status - Removal Actions

- Removal actions are short-term response actions taken to address imminent substantial threats to human health and the environment and are generally surface cleanups
- Non-time critical removal actions can start later than six months to allow for a planning period before on-site activities begin
- Removal Actions do not address long-term restoration of groundwater contamination to return aquifer to beneficial use

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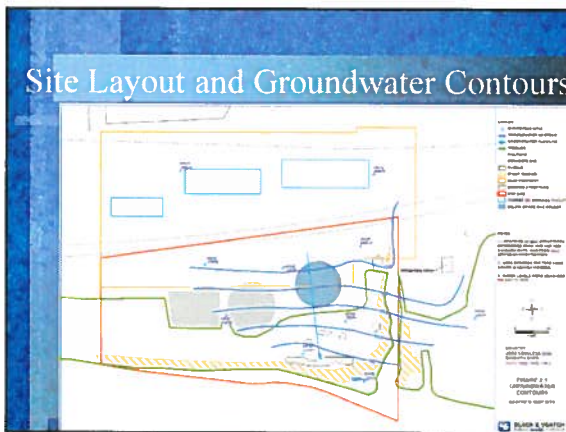
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## Site Layout and Groundwater Contours



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## Extent of Contamination

- The primary contaminants associated with gas plants using coal and oil as feedstock are BTEX and PAHs
- The site has light and dense non-aqueous phase liquids (LNAPL and DNAPL) and a dissolved groundwater plume that extends west toward the Big Blue River
- Tar and oily material found in river sediments and pore water

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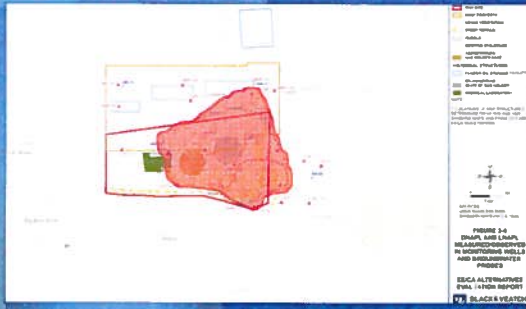
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## Extent of Free Product



## Current / Future Human Risk Exposures

- Exposure by site worker to shallow/surface soil
- Exposure by adult/child to river sediment
- Exposure by adult/child to surface water (river)
- Exposure by site construction/utility worker to subsurface soil

## Removal Actions Planned

- Surface soil removal and off-site disposal
- Removal of gas holder contents and off-site disposal
- Sediment Cap and monitoring
- GW monitoring

The Removal Action will not address NAPL at and below the groundwater table – a major concern for the State

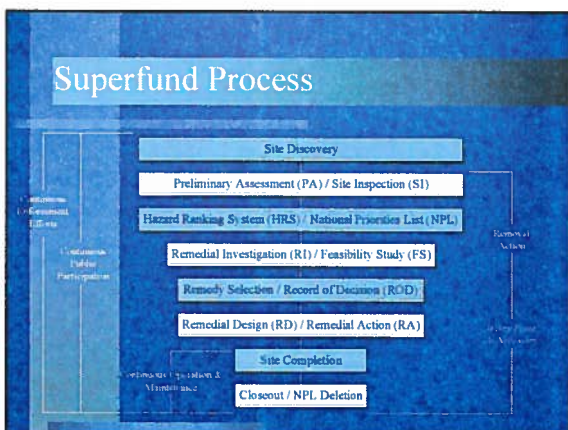
### Additional Cleanup Actions Needed

- Groundwater cleanup and other long-term actions not typically included as Removal Actions
- Title 118 RAC-3 site
  - Groundwater currently not used for drinking water
  - Removal of NAPL required
- NAPL and contaminated groundwater will continue to migrate into river

→ "free product" used in Title 118

### Additional Cleanup Actions Needed

- Long-term cleanup actions can only be addressed as Superfund NPL or State VCP site
- Previous discussions with City and Centel about enrolling site in State VCP
- Have not received a commitment to join State VCP



## Definition of the National Priorities List (NPL)

List of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States

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## Hazard Ranking System (HRS)

- HRS - numerical scoring system used to assess the threat associated with actual or potential releases of hazardous substances at a site
- Evaluates four pathways of exposure, groundwater, surface water, soil, and air

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## HRS (Cont'd)

- Numerical score calculated based on pathway evaluation. A preliminary site score of 28.5 or above is eligible for the NPL
- Score does not represent level of risk, rather a screening level indicator of highest priority releases

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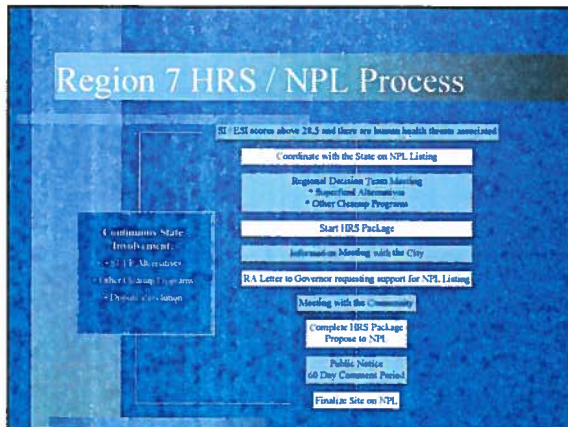
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### State Role

- State role with EPA removal actions limited to identifying state regulatory requirements (ARARs)
- On NPL sites, role consists of recommendation on Governor concurrence, technical assistance to EPA, identification of state requirements, representing interests of the state

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### State Concerns

- Removal action would not meet State Title 118 groundwater cleanup regulations for this pollution event
  - NAPL remaining in subsurface
  - NAPL source for groundwater pollution
- Ongoing threat to river from NAPL and contaminated groundwater

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## Next Steps

- NDEQ seeking written response from City on whether City supports listing site on Superfund NPL
- NDEQ will communicate with Governor's office regarding support for NPL listing
- EPA is continuing the NPL listing process

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## Questions and Feedback

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